

Mr. Russ Zigler and South Platte Task Force

28 June 2007

via e-mail to Mr. Zigler -- For public comment to the Task Force 29 June 2007 Meeting

Dear Ladies and Gentlemen:

With thanks for your service on this Task Force, I am writing because the briefing document posted on internet suggests that important potential responses to the South Platte problems may not be considered.

The Statewide Water Supply Initiative groups and others have moved steadily toward identifying and improving the conditions in which water markets function well. There is substantial scholarship and increasing numbers of new transfers and markets (e.g., a dozen states are described in a 2004 report by Clifford et al. for Washington Department of Ecology; <<http://www.ecy.wa.gov/biblio/0411011>>). In Colorado, substantial efforts are underway to organize a rotational fallow program, as discussed by Peter Nichols Esq. at the January 2007 Colorado Water Congress. Leading Colorado water economists whose work has been influential world-wide in water management have contributed to marketing literature, including Professor Robert Young, retired from Colorado State, Professor Ari Michelsen, formerly Colorado State and still active, and Professor Charles Howe, Emeritus but still active at U. of Colorado. In essence, the economic logic and desirability of better water transfer mechanisms are clearly shown.

Among the compelling reasons for taking these alternative forms of transfer seriously are the potential for dramatically reduced social impacts and damage to rural communities, and the increased support for maintenance of long-term agricultural productivity and capacity. Included in those benefits, functioning water markets would also enable easier and smoother transitions and re-allocations among agricultural users as well as from agriculture to other uses. Howe and Goemans (Journal of the American Water Resources Association, 2003) found that farm-to-farm water transfers in the Northern District were almost 1/4 of the water transferred by volume in the study period, but such transfers are limited to "C-BT" water.

Therefore, I am writing to urge addition of the alternative forms of water transfer to your list of issues to be considered. One clear need that emerged in the SWSI Technical Roundtable discussions was lack of adequate information about water markets, both as potential institutions and about the markets that do exist in Colorado – all markets function best with adequate information. And an important gap in understanding is careful city costing of the alternatives, which involve different financial techniques (e.g., no bonding for water acquisition) and changed obligations (e.g., no revegetation and long-term management obligation, but need for development of new contracts and education of all parties). The Task Force could make an additional contribution by seeking full costing to further assess the alternatives. And, the Task Force may be uniquely suited to soliciting expressions of interest on the part of those who are affected indirectly by the South Platte problems – those who benefit from some conditions may be willing to contribute to their maintenance. The concern with "mitigation" is real and could be partly expressed in markets.

With fully functioning markets, and application of the technology already available and some additional investment in identification of presumptive factors for transferable fractions of the existing water rights, the increased flexibility would allow willing sellers and willing buyers to reallocate water at much lower costs, and temporarily to meet situational needs.

Meanwhile, with recognition of climate change added to the scarcity identified by the SWSI study itself, competition for water is surely greater than ever. Water transfers are not public knowledge until a filing is made in Water Court; we do not know what is happening. But, we do know there is enormous pressure for institutional reform. We use private property and markets, so we should use well-functioning markets.

Sincerely,

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following: "one-pagers" on alternative forms of water transfer and institutional design and "permanence".

ADDING THREE FORMS OF TRANSFER SEEMS TO BETTER MEET DEMANDS

Three forms of transfer appear to meet known needs, with the existing agricultural loans authority and the existing substitute water supply program authority (and maybe a few plain old sales too.). Are any purposes not met? These are alternatives to "buy-and-dry" for many purposes.

1. LONG-TERM ROTATIONAL CROP MANAGEMENT: Features: long-term contracts, should follow principles elsewhere described. Transferor organization allocates "fallow" internally, water not used for irrigation is transferred. The water rights are obligated to the transfer however the contract specifies. No other rights or property need be constrained except that what is sold is sold (e.g. use of some part of water right as specified.)

Expected Use: Base-load water supply for M&I, perhaps high-capital agricultural use.

Financing: Up-front infrastructural investments in conveyance; could be shared among cooperating users; spreads annual water payments for good match of costs and benefits for users; avoids use of municipal bonding capacity for water acquisition, though bonding should be considered for infrastructural investments, to match costs and benefits over time (pay-off in large measure by tap fees for new supply).

Transferors would likely receive initial infrastructural improvements (e.g. Highline-Aurora-Co. Springs lease) and subsequently annual payments for water, fallowing expenses, etc. Parties should negotiate all details of payment. Ditch and Reservoir companies are parties as well as their shareholders. Asset value retained by irrigators; facilities, capacity, socio-economics more stable, less adverse than "Buy-And-Dry".

Authority: May have been possible; now have 37-92-103, -305. Should include water court process since long-term arrangements are involved (decades). Standards for acceptability of prior determinations of transferable fraction are needed. Adoption of suggested principles as refined, by rulemaking.

2. LONG-TERM INTERRUPTIBLE SUPPLY CONTRACT: Features: long-term contracts, similar to rotational crop management, except that transfer of water is not as predictable.

Expected Use: Firming, with three main applications: (1) *dry-year and post-drought recovery* "calls" on schedule of price adjustments to account for time when option exercised, cover expenses; (2) *facility-out-of-service* substitutions, same schedule of price/time of call; (3) *wet-year calls* at different set of prices to enable storage filling, aquifer storage or recharge, etc. while farmer uses wet year for not, less or differently irrigated crops; should involve negotiated risk sharing arrangements, etc.

Financing: Similar to LTRCM, with difference of schedule of prices to reflect different expenses or investments depending on time of call for use of option; probably annual payment for retaining option (income stabilization for irrigator and ditch company).

Authority: Would be similar to LTRCM. Because long-term, careful adjudication warranted. NOT authorized in current C.R.S. 37-92-309, which is limited to 3 of 10 years and 10 year term.

3. WATER BANK: Features: short-term contracts, reversible transfers, very low costs, very quick changes; affordable fast small deals. Duration of approvals limited to 3 years (2? – intent to fill gap if needed while long-term arrangements are made, but should not be substitute. Could even be 18 months, if substitute water supply authority currently available is retained.)

Expected Use: "spot market". Flexibility for surprise needs, surprise opportunities (e.g. expectations for markets due to local or competitor region conditions), and for security of investment in high-capital technology where infrequent needs arise to maintain investment (e.g. fruit trees, greenhouses). (Northern District: 1/3 of transfers (1/4 of volume moved) of CBT water are "ag-to-ag"; see Howe and Goemans in Colorado Water, 2002, or Journal of American Water Resources Association, 2003.)

Financing: Ad hoc, by definition. Any source available, deals as negotiated.

Authority: Similar to current water bank authority (C.R.S. 37-80.5- 101 et seq.) but not limited to in-basin, maximum duration to be specified to distinguish from Interruptible Supply deals; procedural clean-up may be required (Wiener, "next steps" memorandum; other presentations available); and add specification that potential transferors may seek pre-qualification (e.g. show adequate prior determination of HCU). Price discovery and information is the current need for these activities.

SUGGESTED PRINCIPLES FOR WATER TRANSFER INSTITUTION DESIGN –

Avoiding unintended consequences and creating participation to provide certainty

1. Role of the State "Referee" for technical and administrative management, to protect property rights including but not limited to water rights. Defends interests in water quality, soil erosion etc., social impacts as directed, future conditions, and compliance with federal law and interstate compacts. Provides adequate information and institutions to allow successful markets and reduce transactions costs. Provides assurance of certainty of priority. Fosters capacity of local governments to identify and secure needs and interests, usually within markets.

2. Role of the Market Fair and reasonably transparent opportunity for trades of resources and arrangements for risk distribution and management. **Opportunity for third-parties and governments** to seek or preserve conditions they desire, for amenity, tax-related, recreational, environmental or other interests, by purchase, lease, easement or otherwise. Market allocation is preferred to political processes because it allows negotiation flexibility for unique needs and desires, and certainty of property rights. Use the market when it is possible and adequately supported.

3. Certainty is an Essential Purpose Creation of successful alternatives to sale of water rights requires correct specification of property interests, and provisions for adjustment of deals, and adequate efforts to foresee and manage impacts and surprises. Impacts on transferor areas include regional and cumulative impacts, such as total changes in employment, habitats, species, salinity and flow impacts. Failure to anticipate thresholds and limits will threaten certainty. Therefore, the scales of impact analysis and the quality of assessment must be sufficient to anticipate adverse surprises which would remove incentives to avoid water rights sales. If the new program is launched without adequate efforts to provide certainty, surprises will favor some interests over others, and may deny achievement of the policy goals.

4. Allocation Within Thresholds is Important Failure to anticipate thresholds has been illustrated in the South Platte and Arkansas Basins where well users were abruptly brought into compliance with prior appropriation and in some cases taken out of business. (Abrupt adjustment is also underway in the Republican River area). However a limit or threshold arises, from water law, endangered species, a TMDL, or intent to retain some level of agricultural activity, there will be need to allocate within the limit. Parties hoping to join a market who discover that all permits or all capacities are taken may threaten the legitimacy and certainty of arrangements privately made which suddenly prevent other participation. And, reallocation may be important in the future.

5. Transferor "Internal" Allocation by Market Within transferor organizations, there are two sets of adjustments should be possible using market processes. First, resource re-allocation for public purposes, such as salinity reduction, or purchase of environmental conditions may be important. Second, individual situations may call for flexibility within transferor organizations such as mutual ditch companies. Farms and families may want different outcomes and things change. Certainty in the long term requires internal adjustability on the small scale, and proper scale to accommodate individual property rights and preferences while avoiding organizational crisis.

6. Scale Matters: Appropriate Collaborative Institutions Impacts are related to scale, and cumulative impacts are often regional. Identification of impacts and interests is somewhat new in relation to water transfers, partly because of the history of mitigation problems. New transfer mechanisms may need formal collaborative organization (co-ops? districts? ditch companies?) to manage impact assessment and allocate within self-organized areas. There may also be need for regional recreational and environmental consideration, to represent interests new to the market and identify opportunities for coordination and efficiency. Enabling wider participation using markets should more fairly match costs and benefits. Scale issues include areal extent of transferor organization, regional impacts and participant preferences, as well as costs of management and organization.

7. Permanence, Practicality, and Partnerships Buyers of water under long-term deals (e.g. 75 years) will not want to risk insecurity of supply if prices and supplies have changed – as they doubtless will. But, ownership and "buy-and-dry", or occasional lease-backs onto limping farm operations that won't support new technology and expense are not the only answers. Legally, this is leasing, but economically and practically, it is **partnership**. Deals can be designed to assure a fair chance for everyone at the end, or to postpone the end, and the value for everyone can be increased. The same people who pay water rates also voted 110 times in Colorado to spend \$3.4 Billion dollars in taxes on conservation, open space, and farm and land preservation (Trust for Public Land "conservation vote" on website). Simplicity is not the only virtue! The government job is not only to "get water now as fast and cheap as possible" and forget the impacts. **The cities are where most of "the public" in "public interest" lives.** Real partnerships are possible. Cities may not be the best choice for managing farms, revegetation, and agricultural enterprise, but they can make wonderful exchanges with rural areas in education and other common purposes. Reasons for ending a long-term lease are the same as reasons for selling a fee simple titled water right; parties may both share in the benefits of a re-allocation or may share in the benefits of maintaining an arrangement. Infrastructure will always exert a stabilizing influence.